

CLAIMS

1. A leg support garment of a tights type that has stretchability and is applied in close contact with the human body so as to support the legs, the leg support garment comprising a stretchable part having a relatively great straining force,
- wherein the stretchable part having a relatively great straining force includes a stretchable portion (A) having a relatively great straining force that:
- substantially covers the ligamentum collaterale on a medial side of the knee joint of the human body; and
- on a superior side of the knee joint, extends through a length of not less than 1/4 of that of the thigh, along at least one selected from the musculus group consisting of the musculus sartorius, the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis.
2. A leg support garment of a tights type that has stretchability and is applied in close contact with the human body so as to support the legs, the leg support garment comprising a stretchable part having a relatively great straining force,
- wherein the stretchable part having a relatively great straining force includes a stretchable portion (A) having a relatively great straining force that:
- substantially covers the ligamentum collaterale on a medial side of the knee joint of the human body; and
- on a superior side of the knee joint, extends through a length of not less than 1/2 of that of the thigh, along at least one selected from the musculus group consisting of the musculus sartorius, the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis.
3. The leg support garment according to claim 2, being a garment of a tights type that has a length capable of covering at least a range from a waistline to a superior side of the ankle.
4. The leg support garment according to claim 3, wherein:
- the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A1) having a relatively great

straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof so as to surround the patella through not less than approximately 1/4 of the periphery of the patella and to cover at least a part of an inferior region of the patella, and reaches a side of the musculus gastrocnemius and/or the musculus soleus on the medial side; and

on a superior side of the knee joint, extends from a medial side to a lateral side of the thigh via an anterior side thereof approximately along the musculus sartorius to a vicinity of the trochanter major, passing a superior part of the musculus rectus femoris.

5. The leg support garment according to claim 4, wherein the portion expressed as the stretchable portion (A1) having a relatively great straining force further includes a stretchable portion (A1-1) having a relatively great straining force that extends from a vicinity of the trochanter major to a vicinity of the waist along the tractus iliotibialis.

6. The leg support garment according to claim 4, wherein the portion expressed as the stretchable portion (A1) having a relatively great straining force further covers at least a part of a superior region of the patella by extending thereto approximately from a vicinity of the periphery of the patella on the medial side of the patella.

7. The leg support garment according to claim 4, wherein the portion expressed as the stretchable portion (A1) having a relatively great straining force further includes a stretchable portion (A1-2) having a relatively great straining force that extends obliquely upward from a side of the musculus gastrocnemius on the medial side through a vicinity of the periphery of the patella on the inferior side of the patella to a lateral side of the patella.

8. The leg support garment according to claim 4, wherein the stretchable part having a relatively great straining force further includes a stretchable portion (B) having a relatively great straining force that:

extends from a vicinity of the trochanter major downward approximately along the tractus iliotibialis to a lateral side of the patella;

covers at least a part of the inferior region of the patella extending from the lateral side thereof; and

passes a side of the musculus gastrocnemius and/or the musculus soleus on the lateral side.

9. The leg support garment according to claim 3, wherein the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A2) having a relatively great straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof so as to surround the patella through not less than approximately 1/4 of the periphery of the patella and to cover at least a part of an inferior region of the patella, and reaches a side of the musculus gastrocnemius and/or the musculus soleus on the medial side; and

on a superior side of the knee joint, extends approximately along at least one selected from the musculus group consisting of the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis, and reaches a vicinity below the crotch or of the sulcus gluteus.

10. The leg support garment according to claim 9, wherein the portion expressed as the stretchable portion (A2) having a relatively great straining force is a stretchable portion (A2-1) having a relatively great straining force that further covers at least a part of a superior region of the patella by extending thereto approximately from a vicinity of the periphery of the patella on the medial side of the patella.

11. The leg support garment according to claim 3, wherein the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A3) having a relatively great straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof so as to surround the patella through not less than approximately 1/4 of the periphery of the patella and to cover at least a part of an inferior region of the patella, and reaches a side of the musculus gastrocnemius and/or the musculus soleus on the medial side; and

on a superior side of the knee joint, extends from a medial side to a lateral side of the thigh via a posterior side thereof approximately along the musculus semitendinosus and/or the musculus semimembranosus to a vicinity of the trochanter major, passing over the musculus biceps femoris obliquely.

12. The leg support garment according to claim 11, wherein the portion expressed as the stretchable portion (A3) having a relatively great straining force is a stretchable portion (A3-1) having a relatively great straining force that further covers at least a part of a superior region of the patella by extending thereto approximately from a vicinity of the periphery of the patella on the medial side of the patella.

13. The leg support garment according to claim 9, wherein the stretchable part having a relatively great straining force further includes a stretchable portion (B) having a relatively great straining force that:

extends from a side part of the waist approximately along the tractus iliotibialis via a vicinity of the trochanter major, then, approximately along the tractus iliotibialis to a lateral side of the patella;

covers at least a part of an inferior region of the patella, or at least a part of inferior and superior regions of the patella; and

passes a side of the musculus gastrocnemius and/or the musculus soleus on a lateral side of the same.

14. The leg support garment according to claim 4, wherein the portion expressed as the stretchable portion (A) having a relatively great straining force is the stretchable portion (A1) having a relatively great straining force, and further includes, on a superior side of a knee joint part of the stretchable portion (A1) having a relatively great straining force, a stretchable portion (A2') having a relatively great straining force that extends approximately along at

least one selected from the musculus group consisting of the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis to a vicinity of the crotch or a vicinity of the sulcus gluteus.

- 5 15. The leg support garment according to claim 3, wherein:
the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A2') having a relatively great straining force that:
- 10 substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;
extends approximately along a vicinity of a periphery of the patella on a medial side thereof;
surrounds the patella through at least approximately 1/2 or more of the periphery of the patella so as to cover at least a part of inferior and superior regions of the patella, and reaches a side of the musculus gastrocnemius and/or the musculus soleus on the medial side; and
- 15 on a superior side of the knee joint, extends approximately along at least one selected from the musculus group consisting of the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis, and reaches a vicinity below the crotch and a vicinity of the sulcus gluteus;
- 20 and,
the stretchable part having a relatively great straining force further includes a stretchable portion (B') having a relatively great straining force that:
- 25 extends from a side part of the waist approximately along the tractus iliotibialis via a vicinity of the trochanter major, then, approximately along the tractus iliotibialis to a lateral side of the patella;
- 30 surrounds the patella through approximately 1/2 or more of the periphery of the patella so as to cover at least a part of inferior and superior regions of the patella; and
passes a side of the musculus gastrocnemius and/or the musculus soleus on the lateral side.
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16. The leg support garment according to claim 15, wherein:
the stretchable portion (A2') having a relatively great straining force

includes two portions projecting toward the lateral side and covering a part of the inferior region and a part of the superior region of the patella, respectively;

the stretchable portion (B') having a relatively great straining force includes two portions projecting toward the medial side and covering a part of the inferior region and a part of the superior region of the patella, respectively;

said two projecting portions of the stretchable portion (A2') having a relatively great straining force are arranged at positions opposite to said two projecting portions of the stretchable portion (B') having a relatively great straining force, respectively, the positions being slightly shifted to the inferior side from positions of said two portions of the stretchable portion (B') having a relatively great straining force, respectively;

and

when viewed from the front, the portion of the stretchable portion (A2') having a relatively great straining force that covers the inferior region of the patella has a relatively greater area.

17. The leg support garment according to claim 2, wherein the stretchable part having a relatively great straining force further includes:

a stretchable portion (C) having a relatively great straining force that, on the posterior side of the human body, covers a region extending from a certain position in a range from the vertebrae lumbales to the os sacrum, through an approximately middle part of the musculus gluteus maximus at right and left, approximately in a direction along muscular fibers of the musculus gluteus maximus via the top of the bulge of the hip or the vicinity of the same to at least the vicinity of trochanter major; and

a stretchable portion (D) having a relatively great straining force that, on the anterior side of the human body, covers a region extending from a position on the musculus rectus abdominis in the hypogastric region, obliquely downward approximately in a direction along muscular fibers of the musculus obliquus internus abdominis at right and left to the vicinity of the trochanter major.

18. The leg support garment according to claim 1 or 2, being a garment of a tights type that has a length capable of covering at least a range from a waistline to an inferior side of the knee.

19. The leg support garment according to claim 18, wherein:

the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A²¹) having a relatively great straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof so as to surround the patella through not less than approximately 1/4 of the periphery of the patella and to cover at least a part of an inferior region of the patella, and reaches a side of a superior part of the musculus gastrocnemius on the medial side; and

on a superior side of the knee joint, extends from a medial side to a lateral side of the thigh via an anterior side thereof approximately along the musculus sartorius to a vicinity of the trochanter major, passing a superior part of the musculus rectus femoris.

20. The leg support garment according to claim 19, wherein the portion expressed as the stretchable portion (A²¹) having a relatively great straining force further includes a stretchable portion (A²¹⁻¹) having a relatively great straining force that extends from a vicinity of the trochanter major to a vicinity of the waist along the tractus iliotibialis.

21. The leg support garment according to claim 19, wherein the portion expressed as the stretchable portion (A²¹) having a relatively great straining force further covers at least a part of a superior region of the patella by extending thereto approximately from a vicinity of the periphery of the patella on the medial side of the patella.

22. The leg support garment according to claim 19, wherein the stretchable part having a relatively great straining force further includes a stretchable portion (B²) having a relatively great straining force that:

extends from a vicinity of the trochanter major downward approximately along the tractus iliotibialis to a lateral side of the patella;

covers at least a part of the inferior region of the patella extending from the lateral side thereof; and

reaches a side of a superior part of the musculus gastrocnemius on the lateral side.

23. The leg support garment according to claim 18, wherein the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A²²) having a relatively great straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof so as to surround the patella through not less than approximately 1/4 of the periphery of the patella and to cover at least a part of an inferior region of the patella, and reaches a side of a superior part of the musculus gastrocnemius on the medial side; and

on a superior side of the knee joint, extends approximately along at least one selected from the musculus group consisting of the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis, and reaches a vicinity below the crotch or of the sulcus gluteus.

24. The leg support garment according to claim 23, wherein the portion expressed as the stretchable portion (A²²) having a relatively great straining force is a stretchable portion (A²²⁻¹) having a relatively great straining force that further covers at least a part of a superior region of the patella by extending thereto approximately from a vicinity of the periphery of the patella on the medial side of the patella.

25. The leg support garment according to claim 18, wherein the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A²³) having a relatively great straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof so as to surround the patella through not less than approximately 1/4 of the periphery of the

patella and to cover at least a part of an inferior region of the patella, and reaches a side of a superior part of the musculus gastrocnemius on the medial side; and

on a superior side of the knee joint, extends from a medial side to a lateral side of the thigh via a posterior side thereof approximately along the musculus semitendinosus and/or the musculus semimembranosus to a vicinity of the trochanter major, passing over the musculus biceps femoris obliquely.

26. The leg support garment according to claim 25, wherein the portion expressed as the stretchable portion (A²³) having a relatively great straining force is a stretchable portion (A²³-1) having a relatively great straining force that further covers at least a part of a superior region of the patella by extending thereto approximately from a vicinity of the periphery of the patella on the medial side of the patella.

27. The leg support garment according to claim 23, wherein the stretchable part having a relatively great straining force further includes a stretchable portion (B²) having a relatively great straining force that:

extends from a side part of the waist approximately along the tractus iliotibialis via a vicinity of the trochanter major, then, approximately along the tractus iliotibialis to a lateral side of the patella;

covers at least a part of an inferior region of the patella, or at least a part of inferior and superior regions of the patella; and

reaches a side of a superior part of the musculus gastrocnemius on the lateral side.

28. The leg support garment according to claim 19, wherein the portion expressed as the stretchable portion (A) having a relatively great straining force is the stretchable portion (A²¹) having a relatively great straining force, and further includes, on a superior side of a knee-joint-part of the stretchable portion (A²¹) having a relatively great straining force, a stretchable portion (A²²) having a relatively great straining force that extends approximately along at least one selected from the musculus group consisting of the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis to a vicinity of the crotch or a vicinity of the sulcus gluteus.

29. The leg support garment according to claim 18, wherein:

the portion expressed as the stretchable portion (A) having a relatively great straining force is a stretchable portion (A^{22'}) having a relatively great straining force that:

substantially covers the ligamentum collaterale on the medial side of the knee joint of the human body;

extends approximately along a vicinity of a periphery of the patella on a medial side thereof;

surrounds the patella through at least approximately 1/2 or more of the periphery of the patella so as to cover at least a part of inferior and superior regions of the patella, and reaches a side of a superior part of the musculus gastrocnemius on the medial side; and

on a superior side of the knee joint, extends approximately along at least one selected from the musculus group consisting of the musculus semitendinosus, the musculus semimembranosus, and the musculus gracilis, and reaches a vicinity below the crotch and a vicinity of the sulcus gluteus;

and,

the stretchable part having a relatively great straining force further includes a stretchable portion (B^{2'}) having a relatively great straining force that:

extends from a side part of the waist approximately along the tractus iliotibialis via a vicinity of the trochanter major, then, approximately along the tractus iliotibialis to a lateral side of the patella;

surrounds the patella through approximately 1/2 or more of the periphery of the patella so as to cover at least a part of inferior and superior regions of the patella; and

reaches a side of a superior part of the musculus gastrocnemius on the lateral side.

30. The leg support garment according to claim 29, wherein:

the stretchable portion (A^{22'}) having a relatively great straining force includes two portions projecting toward the lateral side and covering a part of the inferior region and a part of the superior region of the patella, respectively;

the stretchable portion (B^{2'}) having a relatively great straining force includes two portions projecting toward the medial side and covering a part of the inferior region and a part of the superior region of the patella, respectively;

said two projecting portions of the stretchable portion (A^{22'}) having a relatively great straining force are arranged at positions opposite to said two projecting portions of the stretchable portion (B^{2'}) having a relatively great straining force, respectively, the positions being slightly shifted to the inferior side from positions of said two portions of the stretchable portion (B^{2'}) having a relatively great straining force, respectively;

and

a vertex of the portion of the stretchable portion (A^{22'}) having a relatively great straining force that covers the inferior region of the patella is positioned at center of the patella, or slightly on a lateral side from the center.

31. The leg support garment according to claim 18, wherein the stretchable part having a relatively great straining force further includes:

a stretchable portion (C) having a relatively great straining force that, on the posterior side of the human body, covers a region extending from a certain position in a range from the vertebrae lumbales to the os sacrum, through an approximately middle part of the musculus gluteus maximus at right and left, approximately in a direction along muscular fibers of the musculus gluteus maximus via the top of the bulge of the hip or the vicinity of the same to at least the vicinity of trochanter major; and

a stretchable portion (D) having a relatively great straining force that, on the anterior side of the human body, covers a region extending from a position on the musculus rectus abdominis in the hypogastric region, obliquely downward approximately in a direction along muscular fibers of the musculus obliquus internus abdominis at right and left to the vicinity of the trochanter major.